

DEPARTMENT OF THE
ARMY TECHNICAL MANUAL
DEPARTMENT OF THE
AIR FORCE TECHNICAL ORDER

TM 11-900A
TO 35C2-3-35-11
C 6

POWER UNIT PE-75-AF

TM 11-900A }
TO 35C2-3-35-11 }
CHANGES No. 6 }

DEPARTMENTS OF THE ARMY
AND THE AIR FORCE
WASHINGTON 25, D.C., 22 January 1963

TM 11-900A/TO 35C2-3-35-11, 8 August 1952, is changed as follows:

Page 72. Add chapter 6 after chapter 5.

CHAPTER 6 (Added)
EQUIPMENT SERVICEABILITY CRITERIA
POWER UNIT PE-75-AF

73. Purpose

The procedures described in paragraphs 74 through 78 will be used to evaluate equipment serviceability. This chapter does not affect the requirements in other portions of the technical manual pertaining to periodic preventive maintenance service on the equipment.

74. Scope

The instructions in this chapter apply to all organizations of the Army and will be performed by first or second echelon maintenance personnel. Evaluation of each assigned equipment will be made periodically in accordance with these instructions; the frequency of the evaluation will be directed by appropriate Commands.

75. Categories of Equipment Serviceability

Equipment will be rated as either *GO* (combat ready) or *NO-GO* (not combat ready).

a. The *GO* condition is subdivided into two categories—GREEN and AMBER.

(1) GREEN—*completely combat ready*.

(a) Equipment passes all applicable tests in this chapter.

(b) All running spares and accessories are on hand at the using organization.

(2) AMBER—*conditionally combat ready*. Equipment passes all applicable tests in this chapter. As soon as the complete prescribed load of running spares and accessories are on hand at the using organization, the category AMBER changes to GREEN.

b. The *NO-GO* classification is defined as category RED. Category RED is in affect when:

- (1) Equipment fails one or more of the applicable tests in this chapter even though all running spares and tools and accessories are on hand at the using organization.
- (2) One or more URGENT modification work orders (MWO) has not been applied.

76. Inspection and Maintenance Worksheet

a. DA Form 2404 (Equipment Inspection and Maintenance Worksheet) will be used to record results of the equipment serviceability evaluation as follows:

- (1) Complete blocks 1, 2, 3, and 5.
- (2) Enter ESE (equipment serviceability evaluation) in block 6.
- (3) Enter publication number and publication date in block 7.
- (4) Enter the item number of each test in column *a* and the symbol P (for pass) or F (for fail) as applicable in column *b*.
- (5) Record the date of each evaluation below the last entry in column *b*.
- (6) After performing the evaluation, the evaluator will sign DA Form 2404 above column *b*. Supervisor will sign after the last entry in column *b*.

b. Lines may be drawn vertically in columns *c* and *d* to record subsequent evaluations. If column *c* or *d* is used for recording subsequent evaluations, the date of evaluation will be recorded and the DA Form 2404 will be signed by the evaluator and his supervisor.

77. Test Conditions.

a. Place Power Unit PE-75-AF (power unit) on a level surface at a safe distance from flammable material. The selected location should be as near to the normal power unit load as possible. Remove the cover from the power unit (if in place) and connect the power unit to the normal load. If the normal load has connecting power cables with plugs attached, insert the plugs into the power output receptacles. If there are no plugs attached to the power cables, connect the normal load to the two binding posts on the side of the suppressor unit. Make sure that the power unit is grounded to a good earth ground.

b. Perform the following:

- (1) Check the crankcase to be sure that it is filled with oil.
- (2) Check the air cleaner to be sure that it is filled with oil to the mark on the air cleaner bowl.
- (3) Check the fuel tank to be sure that it is filled with gasoline and there is no evidence of fuel leaks on or around the power unit.

- (4) Connect a remote fuel supply (if available) to the power unit. Make sure that all connections are tight. Inspect remote fuel supply connections for evidence of fuel leaks.
- (5) Inspect the power unit to make sure that air passages of the air cleaner and muffler are not obstructed.
- (6) Depress the stop button (located on the breaker box next to the carburetor) and crank the power unit a few times to make sure that all parts move freely.

78. Test Items

Follow the procedure described below to test the power unit:

Caution: Be sure that the normal load equipment is turned off before starting the power unit. Equipment damage may result.

	Item	Action	Result
1	Fuel shutoff valve.....	Turn to point down. (On power units procured on Order No. 29-6068-29, turn to point up.)	Valve moves freely with positive action.
2	Stop button.....	Depress; crank engine a few times; observe fuel cleaner bowl.	Fuel cleaner bowl fills with fuel.
3	Carburetor choke lever.....	Turn fully clockwise.	Choke is closed.
4	Starter rope.....	Place starter rope through slot in rim of starter pulley with knot on starter rope outside of pulley rim. Wind starter rope clockwise around starter pulley and give starter rope a quick pull. If power unit fails to start after three or four attempts, try starting with choke partly open or fully open.	Power unit starts.
5	Carburetor choke lever.....	Turn gradually counterclockwise during 15-minute warmup period.	Choke is fully opened when power unit is warmed up. Power unit runs smoothly.
6	Exhaust sound.....	Listen to exhaust.	Exhaust sounds crisp and evenly timed.
7	Exhaust gas.....	Look for smoke.	Exhaust gas is nearly invisible.
8	Power switch on load equipment.....	After 15-minute warmup period, turn on power unit load equipment and check power unit output voltage at load.	Power output voltage is equal to normal input voltage of load equipment. Power unit runs smoothly.
9	Stop button.....	Depress and hold. <i>Note.</i> If remote fuel supply is not connected, restart power unit and turn fuel shutoff valve handle to point up. (On power units procured on Order No. 29-6068-29, turn fuel shutoff valve to point left.)	Power unit stops. <i>Note.</i> Power unit stops after fuel in fuel line and carburetor is consumed.
10	Fuel shutoff valve.....	Turn to point in. (On power units procured on Order No. 29-6068-29, turn to point right.)	Valve moves freely with positive action.
11	Starter rope.....	Same as step 4. <i>Note.</i> It is not necessary to close carburetor choke when starting a warmed up power unit.	Power unit starts.
12	Fuel shutoff valve.....	After 5 minutes of operation, turn to point up. (On power units procured on Order No. 29-6068-29, turn to point left.)	Power unit stops after fuel in fuel line and carburetor is consumed.

TAGO 7688-B

By Order of the Secretary of the Army:

Official:

J. C. LAMBERT,
Major General, United States Army,
The Adjutant General.

EARLE G. WHEELER,
General, United States Army,
Chief of Staff.

Distribution:

Active Army:

DASA (6)
 USASA (2)
 CNGB (1)
 CofEngrs (1)
 TSG (1)
 CSigO (5)
 CoFT (1)
 USA CD Agcy (1)
 USAATBD (1)
 USCONARC (5)
 Hq, Army Mat Comd (5)
 ARADCOM (2)
 ARADCOM Rgn (2)
 OS Maj Comd (3)
 OS Base Comd (2)
 LOGCOMD (2)
 USA Elct Comd (5)
 USA Msl Comd (4)
 USA Strat Comm Comd (4)
 MDW (1)
 Armies (2)
 Corps (2)
 USA Corps (3)
 1st GM Bde (5)
 USMA (5)
 WRAMC (1)
 AFIP (1)
 USATC (2)
 Instl (2) except
 Ft Monmouth (63)
 Svc Colleges (2)
 Br Svc Sch (2)
 GENDEP (OS) (2)
 Army Dep (2) except
 Sacramento (17)
 Lexington (12)
 Tobyhanna (12)
 Ft Worth (8)
 Sig Sec, GENDEP (5)
 Sig Dep (OS) (12)
 Engr Cen (5)

USA Elct R&D Actv, White Sands (13)
 USA Elct R&D Actv, Ft Huachuca (2)
 USA Trans Tml Comd (1)
 Army Tml (1)
 POE (1)
 OSA (1)
 AMS (1)
 Army Pic Cen (2)
 USA Mob Spt Cen (1)
 USA Elct Mat Agcy (25)
 Chicago Procurement Dist (1)
 USARCARIB Sig Agcy (1)
 Sig Fld Maint Shops (3)
 APG (5)
 Dugway PG (5)
 JBUSMC (2)
 Units org under fol TOE's (2 cy ea UNOINDC)

1-7
 1-17
 1-107
 1-127
 1-207
 5-343
 6-100
 6-101
 6-200
 6-201
 6-300
 6-301
 6-302
 6-525
 6-565
 6-575
 6-576
 7
 7-100
 9-47
 9-87

TAGO 7688-B

9-227	10-106
9-377	10-107
11-7	10-201
11-15	10-202
11-16	10-206
11-25	10-377
11-26	10-445
11-27	10-446
11-36	10-447
11-37	10-448
11-38	10-467
11-39	10-500 (Tms AA-AD)
11-45	11-5
11-46	11-6
11-55	11-555
11-56	11-557
11-57	11-587
11-95	11-592
11-96	11-597
11-97	12-17
11-98	17
11-117	19-55
11-155	19-56
11-157	19-57
11-500 (Tms AA-AD) (4)	19-217
29-65	19-247
29-500	19-500 (Tms AA-AE)
30-25	29-1
30-26	29-5
30-500 (Tms AA-AE)	29-21
32-57	29-56
32-500	44-436
33-77	44-437
33-600 (Tms AA-AC)	44-445
37	44-446
39-51	44-447
39-52	44-448
39-62	44-535
39-65	44-536
44-7	44-537
44-8	44-544
44-12	44-545
44-15	44-546
44-16	44-547
44-17	44-548
44-435	55-137
9-500 (Tms AA-AC)	55-138
9-510	57
10-105	57-5

NG: State AG (3); units—same as active Army except allowance is one copy to each unit.

USAR: None.

For explanation of abbreviations used, see AR 320-50.